

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventors:	Glenna G. Mayo, et al.	Examiner: S. R. Pannala
Serial No.:	10/811,259	Group Art Unit: 2164
Filed:	March 26, 2004	Docket No.: 200310943-1
Title:	Access Point that Monitors Guest Usage	

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**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is filed in response to the Final Office Action mailed December 11, 2009 and Notice of Appeal mailed March 11, 2010.

**AUTHORIZATION TO DEBIT ACCOUNT**

It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's deposit account no. 08-2025.

### **I. REAL PARTY IN INTEREST**

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 11445 Compaq Center Drive West, Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

## **II. RELATED APPEALS AND INTERFERENCES**

There are no known related appeals or interferences known to Appellant, Appellant's legal representative, or assignee that will directly affect or be directly affected by or have a bearing on the Appeal Board's decision in the pending appeal.

### **III. STATUS OF CLAIMS**

Claims 1 – 29 are pending in the application and stand finally rejected.  
The rejection of claims 1 – 29 is appealed.

#### **IV. STATUS OF AMENDMENTS**

No amendments were made after receipt of the Final Office Action. All amendments have been entered.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The following provides a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. § 41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element or that these are the sole sources in the specification supporting the claim features.

### **Claim 1**

An access point (FIG. 1, #100), comprising:  
a web server interface (FIG. 1, #150) that couples one or more guests (FIG. 1, #75) to the Internet (paragraphs [0022] – [0024]);  
a usage collector application (FIG. 1, #120) that monitors and collects usage of all of said guests (paragraphs [0029] – [0031]); and  
web cache software (FIG. 1, #110) that proactively caches, in local memory (FIG. 1, #160) of the access point, non-requested web pages that relate to a topic of a web page requested by a guest and indicates to the guest that the non-requested web pages are available for viewing (paragraphs [0032] – [0034]), wherein the access point is a single device that links the one or more guests on personal computers to a broadband or telephone connector from which Internet access is obtained for the personal computers (paragraphs [0013], [0016], [0017], [0019], [0021]. An access point is defined as a device that operates as a bridge or hub to link one or more computer systems to a broadband or telephone connector from which Internet access may be obtained: see lines 11-14 of paragraph [0013] on p. 3.).

Claim 12

A method of providing guests with Internet service (paragraph [0006]), comprising:

detecting at an access point (FIG. 1, #100) a request for Internet access from a guest on a personal computing device (FIG. 1, #75: paragraphs [0016] – [0017]);

monitoring at the access point (FIG. 1, #120) usage patterns of the guest (paragraphs [0029] – [0031]);

predicting non-requested web pages that relate to a topic of a web page requested by the guest and that are of interest for the guest based on the guest's usage patterns (paragraphs [0032] – [0034]); and

locally caching (FIG. 1, #110/160) in the access point the non-requested web pages that are of interest to the guest, prior to the time that the guest requests the non-requested web pages (paragraphs [0032] – [0034]), the access point being a single device that links the guest on the personal computing device to a broadband or telephone connector from which Internet access is obtained for the personal computing device (paragraphs [0013], [0016], [0017], [0019] , [0021]. An access point is defined as a device that operates as a bridge or hub to link one or more computer systems to a broadband or telephone connector from which Internet access may be obtained: see lines 11-14 of paragraph [0013] on p. 3.).

Claim 17

A system for remotely managing a plurality of Internet access points (FIG. 2, #100a-100g), comprising:

a plurality of access points (FIG. 2, #100a-100g) that provide Internet access for one or more guests (FIG. 1, #75: paragraphs [0022] – [0024]), each of said access points being a single device (paragraphs [0013], [0016], [0017], [0019] , [0021]) and including a web server interface (FIG. 1, #150) and a usage collector application (FIG. 1, #120), with the usage collector application detecting and collecting information relating to guest usage (paragraphs [0029] – [0031]);

a remote management (FIG. 1, #200; FIG. 2, #200) server that couples to said plurality of access points via the Internet, said remote server including a remote monitor (FIGS. 1 and 2, #250) and a database (FIGS. 1 and 2, #225: paragraphs [0034], [0035], [0038] – [0044]);

wherein the information relating to guest usage is transferred from the plurality of access points to the remote management server, and the remote management server analyzes the guest usage using software stored in said database to detect usage patterns, and the remote monitor downloads information to one or more access points to enhance the operation of the access point based on the detected usage pattern, wherein the access points cache in local memory non-requested web pages that relate to topics of previously requested web pages by the guests and link personal computers of the guests to a broadband or telephone connector from which the Internet access is obtained for the personal computers, the non-requested web pages being a prediction based on usage patterns of the guests (paragraphs [0038] – [0044]. An access point is defined as a device that operates as a bridge or hub to link one or more computer systems to a broadband or telephone connector from which Internet access may be obtained: see lines 11-14 of paragraph [0013] on p. 3.).

#### Claim 25

An access point (FIG. 1, #100) that permits multiple guests to obtain Internet access, comprising:

means (FIG. 1, #150) in said access point for interfacing said access point with the multiple guests (FIG. 1, #75: paragraphs [0022] – [0024]);

means (FIG. 1, #150) in said access point for coupling the access point to the Internet (paragraphs [0015] – [0017]);

means (FIG. 1, #120) in said access point for monitoring and collecting requests made by a guest to collect information on a guest's usage (paragraphs [0029] – [0031]);

means (FIG. 1, #110) for selecting content that is of interest to the guest based on the guest's usage (paragraphs [0032] – [0034]); and



means (FIG. 1, #160) in said access point for locally storing content that is of interest to the user, wherein the access point is a single device that links the multiple guests on personal computing devices to a broadband or telephone connector from which the Internet access is obtained for the personal computing devices, and the access point predicts and caches in local memory a non-requested web page that relates to a topic previously requested by a guest (paragraphs [0013], [0016], [0017], [0019] , [0021]. An access point is defined as a device that operates as a bridge or hub to link one or more computer systems to a broadband or telephone connector from which Internet access may be obtained: see lines 11-14 of paragraph [0013] on p. 3.).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1, 12, 17, and 25 are rejected under 35 USC § 112, first paragraph, because the best mode contemplated by the inventor has not been disclosed.

Claims 1 – 3, 5, 7, 15, and 17 – 29 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,615,251 (Klug) in view of USPN 6,941,338 (Madsen) and US publication number 2003/0101214 (Kumhyr).

Claims 4, 6, and 16 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,615,251 (Klug) in view of USPN 6,941,338 (Madsen) and USPN 6,963,874 (Kasriel).

## **VII. ARGUMENT**

The rejection of claims 1 – 29 is improper, and Appellants respectfully request reversal of these rejections.

The claims do not stand or fall together. Instead, Appellants present separate arguments for various independent and dependent claims. Each of these arguments is separately argued below and presented with separate headings and sub-heading as required by 37 C.F.R. § 41.37(c)(1)(vii).

### **Claim Rejections: 35 USC § 112**

Claims 1, 12, 17, and 25 are rejected under 35 USC § 112, first paragraph, because the best mode contemplated by the inventor has not been disclosed. Appellants respectfully disagree.

The first paragraph of 35 U.S.C. 112 states is that the specification “shall set forth the best mode contemplated by the inventor of carrying out his invention.” The Federal Circuit has provided a two-prong test to determine compliance for best mode:

First, it must be determined whether, at the time the application was filed, the inventor possessed a best mode for practicing the invention. This is a subjective inquiry which focuses on the inventor’s state of mind at the time of filing. Second, if the inventor did possess a best mode, it must be determined whether the written description disclosed the best mode such that a person skilled in the art could practice it. This is an objective inquiry, focusing on the scope of the claimed invention and the level of skill in the art. (See MPEP 2165 and *Eli Lilly & Co. v. Barr Laboratories Inc.*, 251 F.3d 955, 963, 58 USPQ2d 1865, 1874 (Fed. Cir. 2001)).

First, the examiner has failed to establish a prima facie case to reject claims 1, 12, 17, and 25 as failing to disclose the best mode since the first part of

the test has not been met. **The examiner has provided no evidence whatsoever as to the subjective inquiry into the inventor's state of mind at the time of the filing.** Instead, the examiner is relying on speculation and conjecture that are not supported with any evidence or logical argument.

MPEP 2165.03 clearly states: "Unless the examiner has evidence that the inventors had information in their possession (1) at the time the application was filed (2) that a mode was considered to be better than any others by the inventors, there is no reason to address the second component and there is no proper basis for a best mode rejection." **The examiner has provided no such evidence.**

Second, the examiner has failed to establish a prima facie case to reject claims 1, 12, 17, and 25 as failing to disclose the best mode since the second part of the test has not been met. The examiner has failed to provide a proper analysis to determine whether the written description disclosed the best mode such that a person skilled in the art could practice it (i.e., the second prong of the test which is objective).

The examiner argues that paragraph [0020] shows evidence of concealment. Paragraph [0020] is shown below:

Operationally, the access point is self-managing, with minimal intervention on the part of the host. The access point manages its operation and the content provided to guests based on usage patterns that are measured. These usage patterns include the content and web sites requested by the user, and system parameters relating to performance. By monitoring these usage patterns, the access point can be configured to operate in an intelligent, adaptive fashion. In addition, information regarding the usage patterns may be uploaded to a remote management server, where the patterns may be analyzed by artificial intelligence software that may be impractical to run locally in conjunction with the access point.

This paragraph provides no evidence whatsoever that the inventor attempted to conceal the best mode. Instead, this paragraph explains that the access point manages operations based on guest usage patterns. Information about these patterns can be uploaded to a management server where the patterns are analyzed.

The written description discloses the best mode such that a person skilled in the art could practice it. Figure 1 shows an access point 100 that includes a web server interface 150, a usage collector application 120, and web cache software 110. Paragraphs [0034] – [0036] explain how the web cache software non-requested web pages that relate to a topic of a web page requested by a guest and indicates to the guest that the non-requested web pages are available for viewing (Appellants respectfully ask the BPAI to read these paragraphs). For example, paragraph [0032] states:

As an example, if a Guest is selecting web sites relating to auto repair topics, the web cache application may proactively cache (on local memory 160) certain web sites relating to auto repair that are commonly visited by users seeking auto repair information. Once those non-requested web sites have been cached, then the web server interface 75 may indicate to the Guest that additional web sites of interest are available for viewing.

One skilled in the art would review the figures and read all paragraphs in the application and readily determine that the written description discloses the best mode such that a person skilled in the art could practice it.

Appellants respectfully ask the BPAI to reverse the rejections of the examiner.

**Claim Rejections: 35 USC § 103(a)**

Claims 1 – 3, 5, 7, 15, and 17 – 29 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,615,251 (Klug) in view of USPN 6,941,338 (Madsen) and US publication number 2003/0101214 (Kumhyr). These rejections are traversed.

Principles of Law: Obviousness

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 82 USPQ2d 1385 (2007):

Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. Quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966).

As set forth in MPEP 2143.03, to ascertain the differences between the prior art and the claims at issue, “[a]ll claim limitations must be considered” because “all words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385.

According to the Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in view of *KSR International Co. v. Teleflex Inc.*, Federal Register, Vol. 72, No. 195, 57526, 57529 (October 10, 2007), once the *Graham* factual inquiries are resolved, there must be a determination of whether the

claimed invention would have been obvious to one of ordinary skill in the art based on any one of the following proper rationales:

(A) Combining prior art elements according to known methods to yield predictable results; (B) Simple substitution of one known element for another to obtain predictable results; (C) Use of known technique to improve similar devices (methods, or products) in the same way; (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; (E) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 82 USPQ2d 1385 (2007).

Furthermore, as set forth in *KSR International Co. v. Teleflex Inc.*, quoting from *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006), “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”

Therefore, if the above-identified criteria and rationales are not met, then the cited reference(s) fails to render obvious the claimed invention and, thus, the claimed invention is distinguishable over the cited reference(s).

### Differences Between the Art and Claims

Claims 1 – 3, 5, 7, 15, and 17 – 29 recite one or more elements that are not taught or suggested in Klug in view of Madsen and Kumhyr. These missing elements show that the differences between the combined teachings in the art and the recitations in the claims are great. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

These differences are shown below and presented with separate headings for different claim groups.

### Sub-Heading: Claims 1-3, 5, and 7-11

Independent claim 1 is selected for discussion.

As one example, independent claim 1 recites web cache software that proactively caches, in a local memory of the access point, non-requested web pages that relate to a topic of a web page requested by a guest and indicates to the guest that the non-requested web pages are available for viewing. Klug in view of Madsen and Kumhyr does not teach this claim element.

Klug teaches users connecting to websites with browsers on a computer. The examiner admits that “Klug does not teach explicitly web pages cached in local memory of the access point” (see OA mailed 05/01/2009 at p. 4). Applicants agree with this admission.

Madsen teaches base stations that provide wireless access to and from remote users (see col. 3, lines 8-11). The base stations include a cache 116 that “is used to store information frequently requested by the users associated with the corresponding base station.... In one embodiment, the cache 116 stores frequently requested HTML files and objects” (see col. 4, lines 26-34: portions omitted). Thus, Madsen expressly teaches storing web pages already requested by the user.

The examiner admits that “Klug and Madsen do not explicitly teach pre-fetching non-requested web pages” (see Final OA mailed 12/11/2009 at p. 4).



Appellants agree with this admission. The examiner, however, attempts to cure this deficiency with paragraph [0022] in Kumhyr. Appellants respectfully disagree.

Kumhyr teaches allocating data objects stored on a server system that uses a predictive storage algorithm. As explained in Kumhyr, the predictive storage algorithm determines interest of a group of people using either a static or dynamic process. Paragraph [0022] explains this dynamic process:

In one embodiment, interests determined in a dynamic process may utilize Web page access pattern information. The access pattern information may be used to continuously update and modify the group interests. For example, user groups may change their overall browsing behavior over time reflecting their changing interests as a group. Such changes may be utilized in a dynamic process to continuously update and modify the group interests.

Kumhyr teaches that algorithm analyzes web page access patterns to modify interests of the group, not proactively cache non-requested web pages. In other words, Kuhmyr does not use the algorithm to proactively cache non-requested web pages that relate to a topic of a web page requested by a guest as recited in claim 1. Instead, Kuhmyr is updating group interests. Nowhere does Kuhmyr teach or even suggest that such updates would include proactively cache non-requested web pages that relate to a topic of a web page requested by a guest. Again, Kuhmyr is merely tracking groups and what interests these groups have.

The combination of Klug in view of Madsen and Kuhmyr fails to teach or even suggest web cache software that proactively caches non-requested web pages that relate to a topic of a web page requested by a guest and indicates to the guest that the non-requested web pages are available for viewing. The combination of Klug in view of Madsen and Kuhmyr teaches storing web pages already requested by a user.

As another example, claim 1 recites web cache software that proactively cache non-requested web pages and indicates to the guest that the non-requested web pages are available for viewing. The examiner argues that this recitation is taught in paragraph [0022] of Kuhmyr. Appellants respectfully disagree.

Paragraph [0022] of Kuhmyr teaches a dynamic process that uses Web page access pattern information. This information is stored in a server to track interests of groups. Nowhere does Kuhmyr teach or even suggest that this information would be used to proactively cache non-requested web pages and then indicate to the guest that the non-requested web pages are available for viewing.

As another example, claim 1 recites a usage collector application that monitors and collects usage of all of said guests. The examiner argues that “Klug teaches the claimed, a usage collector application that monitors usage of all of said guests (Fig. 3, col. 10, lines 25-28)” (see OA mailed 05/01/2009 at p. 4). This section, however, does not teach a usage collector that collects usage as claimed.

For at least these reasons, claims 1-3, 5, and 7-11 are allowable over Klug in view of Madsen and Kumhyr.

#### Sub-Heading: Claims 12-15

Independent claim 12 is selected for discussion.

As one example, independent claim 12 recites predicting non-requested web pages that relate to a topic of a web page requested by the guest and that are of interest for the guest based on the guest's usage patterns. Klug in view of Madsen and Kumhyr does not teach this claim element.

Klug teaches users connecting to websites with browsers on a computer. The examiner admits that “Klug does not explicitly teach predicting information of interest for the guest” (see OA mailed 05/01/2009 at pages 6-7). Applicants agree with this admission.

Madsen teaches base stations that provide wireless access to and from remote users (see col. 3, lines 8-11). The base stations include a cache 116 that “is used to store information frequently requested by the users associated with the corresponding base station.... In one embodiment, the cache 116 stores frequently requested HTML files and objects” (see col. 4, lines 26-34: portions omitted). Thus, Madsen expressly teaches storing web pages already requested by the user.

The examiner admits that “Klug and Madsen do not explicitly teach pre-fetching non-requested web pages” (see Final OA mailed 12/11/2009 at p. 7). Appellants agree with this admission. The examiner, however, attempts to cure this deficiency with paragraph [0022] in Kumhyr. Appellants respectfully disagree.

Kumhyr teaches allocating data objects stored on a server system that uses a predictive storage algorithm. As explained in Kumhyr, the predictive storage algorithm determines interest of a group of people using either a static or dynamic process. Paragraph [0022] explains this dynamic process:

In one embodiment, interests determined in a dynamic process may utilize Web page access pattern information. The access pattern information may be used to continuously update and modify the group interests. For example, user groups may change their overall browsing behavior over time reflecting their changing interests as a group. Such changes may be utilized in a dynamic process to continuously update and modify the group interests.

Kumhyr teaches that algorithm analyzes web page access patterns to modify interests of the group, not predict non-requested web pages. In other words, Kumhyr does not use the algorithm to predict non-requested web pages that relate to a topic of a web page requested by the guest and that are of interest for the guest based on the guest’s usage patterns as recited in claim 12. Instead, Kumhyr is updating group interests. Nowhere does Kumhyr teach or even suggest that such updates would include predicting non-requested web

pages that relate to a topic of a web page requested by the guest and that are of interest for the guest based on the guest's usage patterns. Again, Kuhmyr is merely tracking groups and what interests these groups have.

The combination of Klug in view of Madsen and Kuhmyr fails to teach or even suggest predicting non-requested web pages that relate to a topic of a web page requested by the guest and that are of interest for the guest based on the guest's usage patterns. The combination of Klug in view of Madsen and Kuhmyr teaches storing web pages already requested by a user.

For at least these reasons, claims 12-15 are allowable over Klug in view of Madsen and Kumhyr.

#### Sub-Heading: Claims 17-24

Independent claim 17 is selected for discussion.

As one example, independent claim 17 recites access points that cache in local memory non-requested web pages that relate to topics of previously requested web pages by the guests..., the non-requested pages being a prediction based on usage patterns of the guests. Klug in view of Madsen and Kumhyr does not teach this claim element.

Klug teaches users connecting to websites with browsers on a computer. The examiner admits that "Klug does not teach explicitly analyze guest usage" (see OA mailed 05/01/2009 at p. 9). Applicants agree with this admission.

Madsen teaches base stations that provide wireless access to and from remote users (see col. 3, lines 8-11). The base stations include a cache 116 that "is used to store information frequently requested by the users associated with the corresponding base station.... In one embodiment, the cache 116 stores frequently requested HTML files and objects" (see col. 4, lines 26-34: portions omitted). Thus, Madsen expressly teaches storing web pages already requested by the user.

The examiner admits that "Klug and Madsen do not explicitly teach pre-fetching non-requested web pages" (see Final OA mailed 12/11/2009 at p. 10).

Appellants agree with this admission. The examiner, however, attempts to cure this deficiency with paragraph [0022] in Kumhyr. Appellants respectfully disagree.

Kumhyr teaches allocating data objects stored on a server system that uses a predictive storage algorithm. As explained in Kumhyr, the predictive storage algorithm determines interest of a group of people using either a static or dynamic process. Paragraph [0022] explains this dynamic process:

In one embodiment, interests determined in a dynamic process may utilize Web page access pattern information. The access pattern information may be used to continuously update and modify the group interests. For example, user groups may change their overall browsing behavior over time reflecting their changing interests as a group. Such changes may be utilized in a dynamic process to continuously update and modify the group interests.

Kumhyr teaches that algorithm analyzes web page access patterns to modify interests of the group, not cache non-requested web pages. In other words, Kumhyr does not use the algorithm to cache in local memory non-requested web pages that relate to topics of previously requested web pages by the guests..., the non-requested pages being a prediction based on usage patterns of the guests as recited in claim 17. Instead, Kumhyr is updating group interests. Nowhere does Kumhyr teach or even suggest that such updates would include caching non-requested web pages that relate to topics of previously requested web pages by guests. Again, Kumhyr is merely tracking groups and what interests these groups have.

The combination of Klug in view of Madsen and Kumhyr fails to teach or even suggest access points that cache in local memory non-requested web pages that relate to topics of previously requested web pages by the guests..., the non-requested pages being a prediction based on usage patterns of the guests. The combination of Klug in view of Madsen teaches storing web pages already requested by a user.

As another example, claim 17 recites a usage collector application detecting and collecting information relating to guest usage. Klug does not teach a usage collector that both detects and collects usage information.

For at least these reasons, claims 17-24 are allowable over Klug in view of Madsen and Kumhyr.

Sub-Heading: Claims 25-29

Independent claim 25 is selected for discussion.

As one example, independent claim 25 recites the access point predicts and caches in local memory a non-requested web page that relates to a topic previously requested by a guest. Klug in view of Madsen and Kumhyr does not teach this claim element.

Klug teaches users connecting to websites with browsers on a computer. The examiner admits that “Klug does not explicitly teach storing contents in access point local memory” (see OA mailed 05/01/2009 at p. 11). Applicants agree with this admission.

Madsen teaches base stations that provide wireless access to and from remote users (see col. 3, lines 8-11). The base stations include a cache 116 that “is used to store information frequently requested by the users associated with the corresponding base station.... In one embodiment, the cache 116 stores frequently requested HTML files and objects” (see col. 4, lines 26-34: portions omitted). Thus, Madsen expressly teaches storing web pages already requested by the user.

The examiner admits that “Klug and Madsen do not explicitly teach pre-fetching non-requested web pages” (see Final OA mailed 12/11/2009 at p. 13). Appellants agree with this admission. The examiner, however, attempts to cure this deficiency with paragraph [0022] in Kumhyr. Appellants respectfully disagree.

Kumhyr teaches allocating data objects stored on a server system that uses a predictive storage algorithm. As explained in Kumhyr, the predictive storage algorithm determines interest of a group of people using either a static or dynamic process. Paragraph [0022] explains this dynamic process:

In one embodiment, interests determined in a dynamic process may utilize Web page access pattern information. The access pattern information may be used to continuously update and modify the group interests. For example, user groups may change their overall browsing behavior over time reflecting their changing interests as a group. Such changes may be utilized in a dynamic process to continuously update and modify the group interests.

Kumhyr teaches that algorithm analyzes web page access patterns to modify interests of the group, not an access point that predicts and caches non-requested web pages. In other words, Kuhmyr does not use the algorithm to predict and cache in local memory a non-requested web page that relates to a topic previously requested by a guest as recited in claim 25. Instead, Kuhmyr is updating group interests. Nowhere does Kuhmyr teach or even suggest that such updates would include predicting and caching non-requested web pages that relate to a topic of previously requested by a guest. Again, Kuhmyr is merely tracking groups and what interests these groups have.

The combination of Klug in view of Madsen and Kuhmyr fails to teach or even suggest the access point predicts and caches in local memory a non-requested web page that relates to a topic previously requested by a guest. The combination of Klug in view of Madsen teaches storing web pages already requested by a user.

As another example, claim 25 means in said access point for monitoring and collecting requests made by a guest to collect information on a guest's usage pattern. Klug in view of Madsen does not teach such means.

The differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, claims 25-29 are allowable over Klug in view of Madsen and Kumhyr.

Sub-Heading: Claim 2

Dependent claim 2 recites that the access point has web cache software that predicts the non-requested web pages that are of interest to the guest based on that guest's usage pattern, and caches the non-requested web pages in the local memory. The examiner argues that these recitations are taught in Madsen at col. 5, lines 27-33. Appellants respectfully traverse.

Madsen at col. 5, lines 27-33 teaches that the usage pattern algorithm selects files to store in cache. Nowhere does this section of Madsen teach or even suggest that the usage pattern algorithm predicts the non-requested web pages that are of interest to the guest based on that guest's usage pattern.

For at least these reasons, claim 2 is allowable over Klug in view of Madsen and Kumhyr.

Sub-Heading: Claim 3

Dependent claim 3 recites that the web cache software initiates a signal to the guest indicating that the non-requested web pages are available for viewing. The examiner argues that these recitations are taught in Klug at col. 10, lines 37-40. Appellants respectfully traverse.

Klug at col. 10, lines 37-40 teaches when a user moves to a web page stored in a cache. Nowhere does this section of Klug teach or even suggest that the web cache software initiates a signal to the guest indicating that the non-requested web pages are available for viewing.

For at least these reasons, claim 3 is allowable over Klug in view of Madsen and Kumhyr.



Sub-Heading: Claim 14

Dependent claim 14 recites the act of predicting includes proactively caching the non-requested web pages that the access point predicts the guest will want based on a topic for which the guest previously selected web sites. The examiner argues that these recitations are taught in Madsen at col. 5, lines 37-44. Appellants respectfully traverse.

Madsen at col. 5, lines 37-44 teaches anticipatory caching that accesses a newspaper of a user in the morning. Nowhere does this section of Madsen teach or even suggest proactively caching non-requested web pages that the access point predicts the guest will want based on a topic for which the guest previously selected web sites.

For at least these reasons, claim 14 is allowable over Klug in view of Madsen and Kumhyr.

**Claim Rejections: 35 USC § 103(a)**

Claims 4, 6, and 16 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,615,251 (Klug) in view of USPN 6,941,338 (Madsen) and USPN 6,963,874 (Kasriel). These rejections are traversed.

As explained above, Klug in view of Madsen fails to teach or suggest all elements of independent claims 1 and 12. Kasriel fails to cure these deficiencies.

For at least the reasons given for independent claims 1 and 12, respective dependent claims 4, 6, and 16 are allowable over Klug in view of Madsen and Kasriel.

### **CONCLUSION**

In view of the above, Appellants respectfully request the Board of Appeals to reverse the Examiner's rejection of all pending claims.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. 832-236-5529. In addition, all correspondence should continue to be directed to the following address:

**Hewlett-Packard Company**  
Intellectual Property Administration  
3404 E. Harmony Road  
Mail Stop 35  
Fort Collins, CO 80528

Respectfully submitted,

/Philip S. Lyren #40,709/

Philip S. Lyren  
Reg. No. 40,709  
Ph: 832-236-5529

### **VIII. Claims Appendix**

1. An access point, comprising:

a web server interface that couples one or more guests to the Internet;  
a usage collector application that monitors and collects usage of all of said guests; and

web cache software that proactively caches, in a local memory of the access point, non-requested web pages that relate to a topic of a web page requested by a guest and indicates to the guest that the non-requested web pages are available for viewing, wherein the access point is a single device that links the one or more guests on personal computers to a broadband or telephone connector from which Internet access is obtained for the personal computers.

2. The access point of claim 1, wherein the web cache software predicts the non-requested web pages that are of interest to the guest based on that guest's usage pattern, and caches the non-requested web pages in the local memory.

3. The access point of claim 1, wherein the web cache software initiates a signal to the guest indicating that the non-requested web pages are available for viewing.

4. The access point of claim 1, further comprising a diagnostic application that identifies a cause for an increase in access time to retrieve a web site, and a

management application that downloads a patch to the access point to correct the increase in access time to retrieve the web site.

5. The access point of claim 1, wherein each of said guests includes an identification mechanism which is used by said usage collector to compile usage information specific to each guest.

6. The access point of claim 1, further comprising a local monitor that collects usage information from the usage collector application and generates a summary page of system status information and errors detected since the access point was last accessed by a remote server.

7. The access point of claim 6, wherein the local monitor couples to a remote monitor to provide further analysis of the usage information to the remote monitor.

8. The access point of claim 7, further comprising a diagnostic application that launches when the usage collector detects an abnormality.

9. The access point of claim 7, wherein the web server interface includes authentication software that determines if the guest is authenticated to access and use the access point.

10. The access point of claim 8 further comprising a management application that requests programs from the remote monitor based on the result of diagnostic application.

11. The access point of claim 7, wherein the web server interface executes a web server software application that performs tasks of logging in or logging off the guests and collecting payment.

12. A method of providing guests with Internet service, comprising:

- detecting at an access point a request for Internet access from a guest on a personal computing device;

- monitoring at the access point usage patterns of the guest;

- predicting non-requested web pages that relate to a topic of a web page requested by the guest and that are of interest for the guest based on the guest's usage patterns; and

- locally caching in the access point the non-requested web pages that are of interest to the guest, prior to the time that the guest requests the non-requested web pages, the access point being a single device that links the guest on the personal computing device to a broadband or telephone connector from which Internet access is obtained for the personal computing device.

13. The method of claim 12, further comprising transmitting information relating to the guest's usage patterns to a remote server, and analyzing the guest's

usage patterns at the remote server using artificial intelligence software, and correlating the guest's usage patterns with previously detected usage patterns to predict future usage patterns of the guest.

14. The method of claim 12, wherein the act of predicting includes proactively caching the non-requested web pages that the access point predicts the guest will want based on a topic for which the guest previously selected web sites.

15. The method of claim 12, wherein the act of predicting includes considering usage patterns of other guests.

16. The method of claim 12, further comprising identifying an error or sub-optimal condition in the access point and automatically downloading a patch to fix the error or the sub-optimal condition.

17. A system for remotely managing a plurality of Internet access points, comprising:

a plurality of access points that provide Internet access for one or more guests, each of said access points being a single device and including a web server interface and a usage collector application, with the usage collector application detecting and collecting information relating to guest usage;

a remote management server that couples to said plurality of access points via the Internet, said remote server including a remote monitor and a database;

wherein the information relating to guest usage is transferred from the plurality of access points to the remote management server, and the remote management server analyzes the guest usage using software stored in said database to detect usage patterns, and the remote monitor downloads information to one or more access points to enhance the operation of the access point based on the detected usage pattern, wherein the access points cache in local memory non-requested web pages that relate to topics of previously requested web pages by the guests and link personal computers of the guests to a broadband or telephone connector from which the Internet access is obtained for the personal computers, the non-requested pages being a prediction based on usage patterns of the guests.

18. The system of claim 17, wherein the usage collector application also detects information relating to system usage, and said information relating to system usage also is transferred to the remote management server for analysis.

19. The system of claim 17, wherein at least one of the access points is a wireless access point that couples to the one or more guests via a wireless transmission medium.

20. The system of claim 17, wherein the software stored in the database and used to detect usage patterns comprises artificial intelligence software.

21. The system of claim 20, wherein the artificial intelligence software predicts web pages that are of interest to guests based on usage patterns, and the access points include a web cache application for locally caching web pages predicted to be of interest to guests.

22. The system of claim 20, wherein the artificial intelligence software detects improper activity based on usage patterns, and provides instructions to an access point to take corrective action to minimize the effect of the improper activity.

23. The system of claim 17, wherein the access points include a diagnostic application that analyzes the access points to detect possible errors.

24. The system of claim 23, wherein the diagnostic software signals the remote monitor to download a program to an access point to assist in resolving a detected error condition.

25. An access point that permits multiple guests to obtain Internet access, comprising:



means in said access point for interfacing said access point with the multiple guests;

means in said access point for coupling the access point to the Internet;

means in said access point for monitoring and collecting requests made by a guest to collect information on a guest's usage;

means for selecting content that is of interest to the guest based on the guest's usage; and

means in said access point for locally storing content that is of interest to the user, wherein the access point is a single device that links the multiple guests on personal computing devices to a broadband or telephone connector from which the Internet access is obtained for the personal computing devices, and the access point predicts and caches in local memory a non-requested web page that relates to a topic previously requested by a guest.

26. The access point of claim 25, wherein the access point indicates to the guest that the non-requested web page is available for viewing.

27. The access point of claim 25, further comprising means for diagnosing malfunctions of said access point.

28. The access point of claim 26, further comprising means for managing said access point.

29. The access point of claim 28, wherein the selecting means, diagnosing means, and managing means are dynamically modified based on the guest's usage detected by said monitoring means.

**IX. EVIDENCE APPENDIX**

None.

**X. RELATED PROCEEDINGS APPENDIX**

None.